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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,236	10/07/2005	Tetsuya Watanabe	121036-0088	6297
7590 Michael S Gzybowski Butzel Long Suite 300 350 South Main Street Ann Arbor, MI 48104		10/26/2007	EXAMINER MCCLENDON, SANZA L	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 10/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/552,236	WATANABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sanza L. McClendon	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 23 January 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date 10/22/07

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

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## DETAILED ACTION

*Claim Rejections - 35 USC § 102/Claim Rejections - 35 USC § 103*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wantanabe et al (JP2003-105320, herein after JP'320).

Jp'320 sets forth liquid compositions for making gaskets used in HDD application via methods using an automated X-Y-Z coating robot. Said composition comprises a liquid carbonate modified polyurethane acrylate, a diluent (acrylic monomers of formulas 1 and/or 2); and a photoinitiator. Said polyurethane acrylate is obtained by the reaction a polycarbonate polyol having a molecular weight of 1K to 3K, a diisocyanate compound, which can be aliphatic, alicyclic and/or aromatic, a polyhydric alcohol having (meth) acrylic groups, wherein formula 2 reads on applicant's (E) component. Per examples, there is an addition of 5.0 weight percent of a trivalent alcohol-a

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Polyether diol obtained from trimethylol propane. Per examples, JP'320 sets forth addition of the photoinitiator prior to the terminal (meth) acrylating reaction and the addition of a hindered phenolic antioxidant (Irganox 1010, mw. 1178). Regarding claims 3 and 4 (2<sup>nd</sup> part), this method step is deemed to be an obvious variant of claim 2, which is within the skill of an ordinary artisan. The polycarbonate can be added in amounts of 100 parts by weight, the diisocyanate can be added in amounts from at least 20 parts by weight (see examples), the acrylic monomers can be added in amounts from 30 to 300 parts by weight, the polyether triol/polyol can be added in amounts from at least 5 parts by weight (see examples) and the photoinitiator can be added in amounts from 0.1 to 5 parts by weight.

While it is disclosed that compounds of formula 2 can be added, there is not an express teaching and/or example of the amount per weight to add to the composition. However, JP'320 teaches that the acrylate monomers of formula 1 and 2 can be used in mixtures in amounts from 30 to 300 parts by weight. Therefore, the examiner deems that the addition of a compound of general formula 2, in the claimed proportions, is envisioned in the reference. In the alternative, it would have been obvious to add dimethacrylates of general formula 2. The motivation would have been a reasonable expectation of obtaining a crosslinked matrix with a reasonable expectation of success of achieving adequate hardenability and/or the adequate adjustment of hardenability. The viscosity of the polyurethane resin composition is disclosed as being from 100,000 to 1,500,000 mPa\*s. The process in making the gasket includes a high temperature step, which is carried out within a 80 to 180 °C temperature range and a irradiation step for curing the polyurethane composition—see [0029] and the examples.

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 10-11, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, it is unclear if applicant intends to add (G) and (H) prior to the terminal reaction of the hydroxy-containing (meth) acrylate and additionally, adding another (G) and (H) after the above terminating reaction? Or does applicant intends for these to be choices as in one (adding

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(G) and (H) prior to the terminating reaction) or the other method steps (adding (G) and (H) after the terminating reaction) but not both method steps. Clarification is requested.

7. Regarding claims 10-11 and 22, the term "lower alkyl" in the listed claims is a relative term which renders the claim indefinite. The term "lower alkyl" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There are no metes and bounds to lower. Does lower include 1 to 40, 5 to 76, or 1-3? Per applicant's teachings "lower alkyl" has the meaning from 4 to 12 carbon atoms, i.e., page 5. However, as written the claim encompasses 1 up until one defines "lower". Clarification is requested.

*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Sanza L. McClendon  
Examiner  
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